

CDH17 (M)

Format	Catalog No.	Pack size	Dilution
Concentrated	GB3111A,C	0.1, 1.0 mL	1:100
Prediluted	GB3111AA	6.0 mL	Ready to use

PRODUCT DESCRIPTION -

The CDH17 antibody (Cadherin 17 or LI-cadherin) is a newly identified oncogene implicated in tumor invasion and metastasis, and it is expressed in the intestinal epithelium. CDH17 is an exceptionally specific marker for colon cancer (99/99, 100%) and has greater sensitivity compared to CDX2 (93/99, 94%) and CK20 (91/99, 92%). The overexpression of CDH17, along with the underexpression of CDX2, is associated with a poor prognosis in patients with epithelial ovarian cancer. CDH17 may facilitate the early diagnosis of Barrett's esophagus. CDH17 has proven to be an effective marker for differentiating primary urinary bladder adenocarcinoma from urothelial carcinoma exhibiting glandular differentiation. It is important to note that it does not differentiate primary urinary bladder adenocarcinoma from colorectal cancer that secondarily involves the bladder.

INTENDED USE -

CDH17 (M) [1H3] is a mouse monoclonal antibody designed for laboratory application in the qualitative detection of CDH17 protein using immunohistochemistry (IHC) in formalin-fixed paraffin-embedded (FFPE) human tissues. The clinical assessment of any staining or its absence must be supplemented by morphological analyses utilizing appropriate controls and should be interpreted in conjunction with the patient's clinical history and other diagnostic evaluations by a certified pathologist.

SUMMARY AND EXPLANATION -

CDH17 (Cadherin 17 or LI-cadherin) is a recently identified oncogene implicated in tumor invasion and metastasis, with expression shown in the intestinal epithelium. CDH17 is an exceptionally specific marker for colon cancer (99/99, 100%) and has greater sensitivity compared to CDX2 (93/99, 94%) and CK20 (91/99, 92%). The overexpression of CDH17 and the underexpression of CDX2 are associated with a poor prognosis in individuals with epithelial ovarian cancer. CDH17 may facilitate the early diagnosis of Barrett's esophagus. CDH17 has proven to be an effective marker for differentiating between primary urinary bladder adenocarcinoma and urothelial carcinoma exhibiting glandular differentiation. It does not differentiate primary urinary

bladder cancer from colorectal adenocarcinoma that secondarily involves the bladder.

PRINCIPLE OF PROCEDURE -

Antigen detection in tissues and cells is a multi-step immunohistochemistry procedure. The first step attaches the primary antibody to its designated epitope. Following the tagging of the antigen with a primary antibody, a one-, two-, or three-step detection protocol may be utilized. The one-step approach will utilize an enzyme-conjugated polymer that attaches to the main antibody. A two-step approach will involve the addition of a secondary antibody to bind to the primary antibody. An enzyme-conjugated polymer is subsequently introduced to bind to the secondary antibody. The three-step detection protocol will include the addition of a secondary antibody to bind to the main antibody, succeeded by a linker antibody step to enhance binding efficacy. An enzyme-conjugated polymer is subsequently introduced to attach to the linker antibody. The presence of bound antibodies is demonstrated by a colorimetric response.

SOURCE - Mouse monoclonal

SPECIES REACTIVITY - Human; others not tested

CLONE - 1H3

ISOTYPE - IgG1/Kappa

PROTEIN CONCENTRATION - Call for lot specific Ig concentration.

EPITOPE/ANTIGEN - CDH17

CELLULAR LOCALISATION - Cell membrane, cytoplasm

POSITIVE TISSUE CONTROL - Colon carcinoma

KNOWN APPLICATIONS - Immunohistochemistry
30-40 min. At RT. Staining of formalin-fixed tissues requires heating tissue sections in between pH 7.4 - 9.0 for 45 min at 95°C followed by cooling at room temperature for 20 minutes.

SUPPLIED AS - Buffer with protein carrier and preservative

STORAGE AND STABILITY -

Store at 2°C to 8°C. The product is stable to the expiration date printed on the label, when stored under these conditions. Do not use after expiration date. Diluted reagents should be used promptly; any remaining reagent should be stored at 2°C to 8°C.

Materials required but not provided -

- 1) Positive tissue control-Colon carcinoma
- 2) Negative control tissue (internal or external)
- 3) Microscope slides and coverslips
- 4) Staining jars or baths
- 5) Timer
- 6) Xylene or xylene substitute
- 7) Ethanol or reagent alcohol
- 8) Deionized or distilled water
- 9) Heating equipment or enzyme for tissue pretreatment step
- 10) Detection system
- 11) Chromogen
- 12) Wash buffer
- 13) Hematoxylin
- 14) Antibody diluents
- 15) Peroxide block
- 16) Light microscope
- 17) Mounting medium

LIMITATIONS-

The optimum antibody dilution and protocols for a specific application can vary. These include, but are not limited to fixation, heat-retrieval method, incubation times, tissue section thickness and detection kit used. Due to the superior sensitivity of these unique reagents, the recommended incubation times and titers listed are not applicable to other detection systems, as results may vary. The data sheet recommendations and protocols are based on exclusive use of Genebio products. Ultimately, it is the responsibility of the investigator to determine optimal conditions.